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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,200	12/28/2004	Antoine Bassompierre	W51.12-0015	3476

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EXAMINER

PHAM, TUAN

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/501,200	Applicant(s) BASSOMPIERE ET AL.	
	Examiner TUAN A. PHAM	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/26/2007 has been entered.

Claim Objections

2. Claims 1-14 are objected to because of the following informalities:
As claims 1-14, the term "the said" should be replaced with --said--.
Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. **Claims 1, 4-5, 9, 11, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. Pub. No.: 2005/0059401, hereinafter, "Chen") in view of Haapoja et al. (Pub. No.: 2002/0127982, hereinafter, "Haapoja").**

Regarding claims 1, and 12-14, Chen teaches a method and transmission device for management of communication in a communication network comprising at least one transmission device (read on base station)(see figure 6, base station BS1) and at least one terminal (read on remote station)(see figure 6, remote station) adapted to receiving data from the said at least one transmission device (see figure 6, the remote station is receiving the data from the base station BS1) wherein the method comprises: setting up a communication between one of the said transmission devices called the transmission device, and one of the said terminals called the receiving terminal, using a first communication mode based on a single carrier modulation (read on first mode is based on single carrier protocol)(see figure 6, col.6, [0082]); and changeover to a second communication mode using a multiple carrier modulation, a communication channel using the said multiple carrier modulation being assigned to the communication between the said transmission device and the said receiving terminal

(read on second mode is based on multi-carrier protocol)(see figure 7, col.6, [0082]); the first and second communication modes being implemented successively and alternately (see figure 6, figure 7, col.6, [0082]), and wherein the changeover to the second communication mode is implemented according to at least one signaling information transmitted by the transmission device to the receiving terminal through the first communication mode (see figure 6, figure 7, col.6, [0082]).

It should be noticed that Chen fails to teach a communication channel using the multiple carrier being solely assigned to a downlink. However, Haapoja teaches such features (see figure 1, base station 50, mobile 100, [0034-0035, 0051]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Haapoja into view of Chen in order to optimal performance in current consumption and cost effectiveness as suggested by Haapoja at [0040].

Regarding claim 4, Chen further teaches said first communication mode is adapted to carrying out operations for management of setting up, maintaining, and closing of a communication between the transmission device and the receiving terminal (see figure 6, figure 7, col.6, [0082], base station is performed the hand-off, therefore, it perform all functions such as setup, and maintain the communication between the base station and mobile device).

Regarding claim 5, Chen further teaches said communication network is a mobile communication network (see figure 1).

Regarding claim 9, Chen further teaches said second communication mode is adapted to transmitting data at high speed between the said transmission device and the said receiving terminal (see col.6, [0079]).

Regarding claim 11, Chen teaches the said transmission device is a base station in a cellular communication network (see figure 6).

5. Claims 2-3 rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. Pub. No.: 2005/0059401, hereinafter, "Chen") in view of Haapoja et al. (Pub. No.: 2002/0127982, hereinafter, "Haapoja") as applied to claim 1 above, and further in view of Alard (U.S. Patent No.: 6,584,068).

Regarding claim 2, Chen and Haapoja, in combination, fails to disclose OFDM type modulation with a guard interval. However, Alard teaches such features (see col.4, ln.27-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Alard into view of Chen and Haapoja in order to limited the interference as suggested by Alard at column 4, lines 62-67.

Regarding claim 3, Alard teaches said multiple carrier modulation is an IOTA type modulation (see col.8, ln.25-32).

6. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. Pub. No.: 2005/0059401, hereinafter, "Chen") in view of Haapoja et al. (Pub. No.: 2002/0127982, hereinafter, "Haapoja") as applied to claim 1 above, and further in view of Jou (U.S. Patent No.: 6,925,067, hereinafter, "Jou").

Regarding claim 6, Chen and Haapoja, in combination, fails to disclose the common channel that is intended to all the terminals managed by the said transmission device. However, Jou teaches such features (see col.10, ln.16-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Jou into view of Chen and Haapoja in order to use a common channel to communicate with all the mobile phone.

Regarding claim 7, Jou teaches said first communication mode uses at least one access channel type downlink common channel, enabling the said changeover to the said second communication mode (see col.11, ln.54-67).

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. Pub. No.: 2005/0059401, hereinafter, "Chen") in view of Haapoja et al. (Pub. No.: 2002/0127982, hereinafter, "Haapoja") as applied to claim 1 above, and further in view of Bohnke (U.S. Patent No.: 6,567,383).

Regarding claim 8, Chen and Haapoja, in combination, fails to disclose uplink common channel (RACH) to acknowledge data transmitted correctly to the said reception terminal when the second communication mode is being used. However, Bohnke teaches such features (see col.7, ln.26-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Bohnke into view of Chen and Haapoja in order to transmit the data by using the uplink channel.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. Pub. No.: 2005/0059401, hereinafter, "Chen") in view of Haapoja et al. (Pub. No.: 2002/0127982, hereinafter, "Haapoja") as applied to claim 1 above, and further in view of Dolgonos et al. (Pub. No.: US 2002/0147978, hereinafter, "Dolgonos").

Regarding claim 10, Chen and Haapoja, in combination, fails to disclose Internet type data to the said receiving terminal. However, Dolgonos teaches such features (see [0008]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Dolgonos into view of Chen and Haapoja in order to transmit the high-speed data.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2618
March 27, 2007
Examiner

Tuan Pham

Supervisory Patent Examiner
Technology Center 2600

Matthew Anderson